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## GERMAN WAR FINANCE

### I

For some years the Imperial government and the Reichsbank had been preparing for just such a crisis as that of August, 1914. As the plans for military mobilization had been prepared in detail, so in the same way the plans for financial mobilization had been carefully worked out, hinging on a credit system of such elasticity that it could cope with the suddenly increased call for credit which would mark the beginning of a war.<sup>1</sup> The Reichsbank, through its power to issue notes, was to provide the means of payment to cover the expenses of mobilization and also to quiet the panic and tide industrial life over the disturbances incidental to a war. There was much discussion as to whether or no the bank regulation requiring the redemption of the bank notes in gold should be suspended. The general opinion of financial writers was that a war should be carried on with irredeemable paper money. Provision was to be made for institutions which should grant loans on security and relieve the Reichsbank of such business. Loans were to be relied upon to meet the actual war expenses after mobilization.

<sup>1</sup> See Karl Helfferich, *Das Geld im russisch-japanischer Kriege* (Berlin: Ernst Siegfried Mittler u. Sohn, 1906); J. Riesser, *Finanzielle Kriegsbereitschaft und Kriegsführung* (Jena: Gustav Fisher, 1909 and 1913); Moritz Ströll, "Über das deutsche Geldwesen im Kriegsfall," Schmoller's *Jahrbuch*, XXIII (1899).

The general outline of such a plan was well known to the public. The details could only be guessed, but as Dr. Ströhl wrote: "They have been long decided upon. It would be an insult to the Imperial officials to believe otherwise."<sup>1</sup>

If the Reichsbank were issuing great quantities of notes, a large gold reserve would help to maintain public confidence in the paper money. President Haverstein adopted a policy of gold concentration. He greatly increased the business of buying gold bills and credits payable in foreign countries, to avoid sending gold abroad to pay international balances.<sup>2</sup> To keep the gold in the bank an endeavor was made to accustom the public to more paper money than they had been using. With this aim the law of 1906 allowed the Reichsbank to issue notes of 50 and 20 marks. Previously the issues had been restricted to denominations of 1,000, 500, 200, and 100 marks. In 1909 the bank notes were made full legal tender, but of course they were at that date still redeemable in gold on demand. The Reichsbank also brought pressure to bear upon the banks of deposit to keep larger balances with it. The panic of 1907, and the disturbances on the Bourse and in the financial world during the Morocco affair of 1905 and the Second Balkan War of 1912, showed that this system of making the Reichsbank the holder of the metallic reserve and the regulator of the monetary affairs of Germany must be energetically continued.

Before the war one heard many doubts cast upon the existence of the Imperial "war treasure," or "war chest," which was supposed to be kept in the Julius Tower at Spandau, near Berlin. That it did exist we have now no doubt. It is distinctly mentioned in the *Report of the Reichsbank for 1914*, and in the various accounts of the German war finance.<sup>3</sup> It had been an old Prussian tradition to maintain a state treasure in minted money. When the Empire was established, Prussia gave up her treasure, but it was carried on by the Imperial government. From the French war indemnity

<sup>1</sup> *Bank-Archiv*, XIII, No. 2 (October 15, 1913), p. 18.

<sup>2</sup> In 1907 such bills were bought to the amount of 268.1 million marks; in 1913, to the amount of 832.5 million marks.

<sup>3</sup> *Report of the Reichsbank for 1914*, translation in *Bankers' Magazine*, London, October, 1915.

120 million marks in gold coin were set aside in the Julius Tower for an Imperial "war treasure." It was under the management of the Chancellor and the Imperial Debt Commission, and was only to be used for mobilization with the consent of the Reichstag.<sup>1</sup> In July, 1913, this treasure was increased by the passage of a law providing for an additional 120 million marks in gold to be obtained by the sale of Imperial treasury notes.<sup>2</sup> Of this amount, 85 million marks had been collected before the war, so that in July, 1914, there was a "war treasure" of 205 million marks in gold in the Julius Tower.

In 1913 also, a special tax, the *Wehrbeitrag*—contribution to the national defense—was imposed for the purpose of increasing the army. This was a non-recurring tax imposed on property and incomes.<sup>3</sup> It was estimated that it should net 1,000 million marks. The assessments were to be met in three instalments payable in 1914, 1915, and 1916. In the spring of 1914, some 300 million marks were paid in to the Imperial Treasury. It has not been possible to find figures for the amount received in 1915, if anything has been received.

The Reichsbank and the government worked together on these plans for financial mobilization. The connection between the two has always been close, although the bank is owned by private shareholders and not by the government. The management, however, it will be remembered, is controlled by the Chancellor, the active business being carried on by the president and the bank

<sup>1</sup> J. Jastrow, *Im Kriegszustand* (Berlin: Georg Reimer, 1914), p. 24.

<sup>2</sup> Law of July 3, 1913, *Reichsgesetzblatt* ("Imperial Gazette"), p. 521.

<sup>3</sup> The purpose of this tax was to provide funds for the addition of some 80,000 men to the army and for military works. The tax on property began at 10,000 marks, or if the property-owner's income was less than 4,000 marks a year, at 30,000 marks, and if the income was less than 2,000 marks, at 50,000 marks. For the first 50,000 marks the tax was 0.15 per cent, rising by degrees to 1.5 per cent on property over 5,000,000 marks. There was also a tax on incomes. This commenced with a tax of 1 per cent on incomes between 5,000 and 10,000 marks, rising to 8 per cent on incomes over 500,000 marks. When this income tax was being assessed, income from property was not taxed. This income was estimated as 5 per cent of the property, and only what remained of the income above this amount was subject to taxation. Reductions in the tax were made for large families, especially where several sons had performed military service.

directors, who are appointed for life by the Emperor at the suggestion of the Bundesrat. The shareholders are represented by a committee, the Zentral-Ausschuss, elected from their numbers, which has certain advisory powers.<sup>1</sup>

## II

The Sarejevo tragedy, June 28, 1914, caused a pronounced weakness on the Berlin Bourse, especially in securities controlled by Vienna. But the situation in the money market remained fairly favorable, the private discount rate for the last week in June

<sup>1</sup> The Reichsbank is intended eventually to have a monopoly of the note issue. This privilege is at present shared with four banks, the banks of Saxony, Baden, Bavaria, and Württemberg, which have retained their privileges from before 1870. The Reichsbank was largely modeled after the Bank of England; but to avoid the suspension of the Bank act in times of panic, the regulations concerning the note issue were changed. The Reichsbank issues notes without direct limitation according to the requirements of its business. No limit is fixed for the aggregate amount of notes issued; but the possible total of notes which may be issued without being covered by cash is fixed at 550 million marks, which sum may be increased at the end of the quarters, March, June, September, and December, when business is particularly active, to 750 million marks. This is the so-called "contingent" circulation. Any notes issued beyond this limit and not covered by cash, must pay a tax of 5 per cent per annum. There is the further indirect limitation that in all cases one-third of the notes issued must always be covered by cash, i.e., German coin, gold bullion, or foreign coin 1,392 marks to the pound fine, and Imperial treasury notes. The other two-thirds must be covered by commercial paper having not more than three months to run and bearing at least two, and as a rule three, names. Thus, if at a certain date, say in January, the Reichsbank had 1,000 million marks in cash, it could issue 3,000 million marks in notes. Of this amount 1,550 million marks would be tax-free, but on the balance a tax of 5 per cent would have to be paid.

Bank act of March 14, 1875 and June 1, 1909:

Sec. 17. "The Reichsbank must hold in its vaults, as cover for the outstanding notes, at least one-third their amount in legal German money, Imperial treasury notes, gold in bar or foreign money, 1,392 marks to the pound fine, and the rest in discounted bills which have not more than three months to run and which as a rule bear three names and always at least two; or checks which bear at least two signatures of known responsible persons."

Sec. 9. "Banks with a note circulation exceeding their cash reserves and the amount of notes assigned to them are from January 1, 1875, on, to pay to the Imperial Treasury a tax of 5 per cent annually on the surplus."

Authorized note issue of German banks:

Reichsbank . . . . .	550,000,000 marks (at the end of the quarters, 750,000,000 marks)
Bank of Bavaria . . . . .	32,000,000
Bank of Saxony . . . . .	16,771,000
Bank of Württemberg . . .	10,000,000
Bank of Baden . . . . .	10,000,000

being  $2\frac{5}{8}$  per cent. The industrial demand for capital was small and the Reichsbank officials pointed out that this was an opportune time to increase reserves. The Berlin banks were asked to raise their reserves to 10 per cent of their total liabilities, nearly double the amount usually held, and the provincial banks to 8 per cent. This increase was urged as a precaution against hard times, but it would naturally be a factor of strength in case of war.

During July, the Bourse quotations fluctuated because the public was nervous and there were large orders to sell while very few persons were buying. The ultimatum of Austria to Serbia was sent on July 22. On July 23, the panic broke in Berlin when the business world realized that there was no longer the possibility of localizing the war. Securities listed on the Berlin Bourse fell heavily. On July 25, the *Coulisse* in Paris, and on July 27, the stock exchanges at Vienna and Budapest were closed. In Berlin there was at first no talk of closing the Bourse; but heavy foreign orders to sell were continuously received and securities fell from 6 to 20 per cent. On July 28, war was declared between Austria and Serbia. On July 29, all but cash business was suspended on the Bourse, and on July 31, after the declaration of a state of war at one o'clock in the afternoon, quotations ceased altogether. An arrangement among the bankers provided for an extension of the July settlements and of the credits which had been granted in connection with them.<sup>1</sup> The quotations failed to appear in the evening papers, but to allay the panic that this might cause, the Reichsbank had notices posted to the effect that it would, as previously, grant loans on security. This business was later taken over by the *Darlehnskassen* which were established for the purpose.

Meantime the price of foreign exchange had been rising, especially exchange on Paris and London. Both these markets lend extensively in Germany. With the certainty of war they called in their debts, thus creating in Berlin a great demand for bills on London, for such bills are the common medium of international payments. At the same time trade had to a considerable extent

<sup>1</sup> The management of the Bourse postponed the monthly settlements from month to month until May, 1915, when arrangements were made to have them gradually settled. See *Bank-Archiv*, XIV, No. 15 (May 1, 1915), p. 257.

ceased, and with the cessation of the export trade the means of supplying new bills on London was extinguished. On July 25, 1914, exchange on London was selling at 20.57 (par 20.42), the highest point it had ever reached; but by August 1, it was merely nominal, there being practically no bills on London to be had.

The demand on the banks became heavy toward the end of July. Depositors withdrew their accounts, the usual tendency in a panic to hoard hard money, and especially gold, manifesting itself. After July 28, the private banks ceased paying gold and people flocked to the Reichsbank to have bank notes redeemed in gold. On August 1, the Reichsbank notices appeared on the advertising pillars of Berlin, calling the attention of the public to the fact that since the law of 1909 had made the Reichsbank notes full legal tender they were as good as gold in making payments, and so it was quite useless to change them into gold. On the afternoon of the same day the Reichsbank ceased to redeem its notes. This action was later legalized by the Reichstag.<sup>1</sup>

How great the run on the banks was it is difficult to say, but there was a decided fall in the gold reserve of the Reichsbank. It fell from 1,357 million marks on July 23, to 1,253 million marks on July 31, a reduction of 103 million marks in one week. Altogether the total withdrawals of cash from the Reichsbank for the week were 1,050 million marks greater than during the corresponding week in 1913. On August 3, 7,000 persons withdrew 935,000 marks from the Berlin savings banks and on August 4, 865,000 marks were withdrawn.<sup>2</sup> That there was some dissatisfaction with the action of the banks seems certain. In a report from Hannover there is a complaint that "from the first moment of mobilization our great banks proved themselves unworthy of their task. They abused their power in a manner almost criminal. How otherwise can we judge the fact that on August 1, they refused to pay deposits, and then declared themselves ready to pay 10 per cent and later 5 per cent?"<sup>3</sup>

<sup>1</sup> Law concerning Imperial treasury notes and Reichsbank notes, August 4, 1914, *Reichsgesetzblatt*, p. 347, sec. 3.

<sup>2</sup> *Report of the Savings Banks for 1914*. The total deposits in the Berlin savings banks on August 1 were 400 million marks.

<sup>3</sup> *Archiv für Sozialwissenschaft*, December, 1914, p. 75.

The hoarding of coin resulted in a currency stringency, small coin disappearing from circulation. The Reichsbank had difficulty in supplying the small currency needed in business. In July, 1913, the Chancellor had been authorized to coin 120 million marks in silver. Some 6 million marks of this amount had been coined since that date and was now put in circulation through the Reichsbank. The government also deposited in the bank 5.8 million marks of token money and 35 million marks of Imperial treasury notes in denominations of ten marks.<sup>1</sup> But in spite of these additions the bank's stock of small money fell from 344 million marks on July 23, to 18.6 million marks on October 7, 1914. The demand for small currency was so urgent that some municipalities issued 50-pfennig and 1-mark notes, and large factories resorted to their own printed promises to pay. Some 6.3 million marks of such paper was issued, but it had all been called in by the end of September, 1914.<sup>2</sup> It was only after the order of the Bundesrat, on August 31, permitted Darlehnskassen notes of small denominations that it was possible gradually to supply the need for divisional money.<sup>3</sup>

### III

The Reichstag met on August 4, 1914, and passed the war measures presented by the government without discussion. It is interesting to note as evidence of preparedness that although the bills were first presented to the Reichstag on August 4, many of the printed copies which were posted that evening in Berlin bore the date August 2.

The first step was to provide the Reichsbank with a broad basis for the issue of large amounts of paper money. To maintain public confidence in this paper and to facilitate the settling of affairs at the end of the war, a large gold reserve was considered essential. To avoid any possible drain on this reserve with the danger that

<sup>1</sup> Dr. S. Buff, *Annalen des Deutschen Reichs*, No. 2/3 (April, 1915), p. 106.

<sup>2</sup> Buff, *op. cit.*, p. 108.

<sup>3</sup> *Reichsgesetzblatt*, p. 393. Authorized denominations of 1 and 2 marks. Further provision for small notes was made later. On March 22, 1915 (*ibid.*, p. 179), a further issue of Imperial treasury notes in denominations of ten marks was authorized and at the same time the Reichsbank was allowed to issue its notes in denominations of ten marks.



the gold might be sent abroad, the Imperial treasury notes were made legal tender;<sup>1</sup> and at the same time the Imperial Treasury and the Reichsbank were relieved of the obligation of redeeming their notes in gold.<sup>2</sup> The four private banks might redeem their notes in notes of the Reichsbank.<sup>3</sup> The Imperial Treasury need no longer change silver, copper, and nickel coin for gold, but might give Imperial treasury notes or Reichsbank notes for divisional money brought to its offices.<sup>4</sup>

The Bank act was technically speaking not suspended, because the regulation concerning the one-third cash cover for the notes remained in force; but the constituents of this cash were changed to include the Darlehnskassen notes. The term "commercial paper," by which the other two-thirds of the notes must be covered, was extended to include Imperial treasury bills and Imperial bonds falling due within three months.<sup>5</sup> The 5 per cent tax on all issues above the amount of the cash plus the contingent circulation was suspended.<sup>6</sup>

As we have mentioned, the basis for the note issues was broadened through the note issues of the Darlehnskassen (loan bureaus). These credit institutions originated in Prussia in 1848 and their popularity was so great that they were revived during the wars of 1866 and 1870. They were designed for the purpose of relieving the need for credit and especially of granting loans to persons wishing to raise money on securities or merchants' stocks, which is always a difficult thing to do in time of panic or depression.<sup>7</sup> While the German plan necessitated facilities for granting such loans, it was essential that they should not press the Reichsbank, which must keep its assets as liquid as possible. These Darlehnskassen may be established in any town within the Empire where there is

<sup>1</sup> Law concerning Imperial treasury notes and Reichsbank notes, August 4, 1914. *Reichsgesetzblatt*, p. 347, sec. 1.

<sup>2</sup> *Ibid.*, sec. 2.

<sup>3</sup> *Ibid.*, sec. 3.

<sup>4</sup> Law concerning the alteration of the Mint act, August 4, 1914, *ibid.*, p. 325, sec. 1.

<sup>5</sup> Law concerning the alteration of the Bank act, August 4, 1914, *ibid.*, p. 325, secs. 2 and 3.

<sup>6</sup> Law concerning the alteration of the Bank act, August 4, 1914, sec. 1.

<sup>7</sup> Darlehnskassen act, August 4, 1914, *Reichsgesetzblatt*, p. 340, sec. 1.

a branch of the Reichsbank, if the Chancellor thinks it necessary. They may have branches in the smaller neighboring villages. By the end of December, 1915, 99 Darlehnskassen had been founded with 149 branches.

For the whole amount of the loan granted by these bureaus to the various borrowers, a particular form of money known as Darlehnskassen notes is issued.<sup>1</sup> They are to be taken at their face value by all Imperial and state public offices, but are not compulsory legal tender. The total amount to be issued was at first limited to 1,500 million marks, but the Bundesrat was given the right to increase the amount and has raised it to 3,000 million marks.<sup>2</sup> These notes were at first issued in denominations of 5, 10, 20, and 50 marks,<sup>3</sup> and later of 1 and 2 marks.<sup>4</sup> As cover for issues of the Reichsbank they are on an equality with Imperial treasury notes.<sup>5</sup>

The loans are made in amounts of not less than 100 marks and are, under ordinary conditions, not to run for more than three months. In unusual circumstances they may be granted for six months.<sup>6</sup> As security,<sup>7</sup> the Darlehnskassen may accept the pledge of goods, agricultural, mineral, or industrial products, located within the Empire. These are to be valued at one-half, or in exceptional cases at two-fifths, of their value, according to the possibility of selling them. Such goods when pledged are not transferred to the Darlehnskassen but are marked with a special stamp. Securities issued by the Empire, by a German state, or by a corporation, joint stock company, or limited partnership, in accordance with the legal regulations, may also be accepted at a deduction from their face value. Other securities may serve, if passed upon by the general administrative board. If such goods or security are subject to fluctuations in price the loan must be guaranteed by a third person.<sup>8</sup> Promises to pay of the Imperial government

<sup>1</sup> *Ibid.*, sec. 2.

<sup>2</sup> November 11, 1914, *Reichsgesetzblatt*, p. 475.

<sup>3</sup> Darlehnskassen act, August 4, 1914, sec. 18.

<sup>4</sup> Law of August 31, 1914, *Reichsgesetzblatt*, p. 393.

<sup>5</sup> Darlehnskassen act, August 4, 1914, sec. 2.

<sup>6</sup> *Ibid.*, sec. 3.

<sup>7</sup> *Ibid.*, sec. 4.

<sup>8</sup> *Ibid.*, sec. 5.

or of a German state may also be used as security, in which case they are to be registered with the Department of Public Accounts.<sup>1</sup> If the loan or the interest is not paid when due, or if the borrower goes into bankruptcy, the Darlehnskassen have the right to sell the security without recourse to the courts.<sup>2</sup> The rate of interest as a rule is not to be higher than the published rate at which the Reichsbank buys bills.<sup>3</sup>

The Darlehnskassen are under the general control of the Reichsbank officials but in no way connected with the usual business of the bank. The general administrative board in Berlin receives detailed instructions from the Chancellor as to the methods of business to be followed. Each Darlehnskasse also has a board of directors consisting of men with business experience. Two members of the board act as managers for alternate weeks. On each board there is an Imperial representative appointed by the Chancellor. It is his duty to be conversant with the entire business of the Darlehnskasse and to fix the amount to be lent on various securities within limits set by the Chancellor, and also to decide what loans shall be granted.<sup>4</sup> After the cost of administration has been met, the profits of the Darlehnskassen are to be put aside to cover any possible deficit and to be ready for the redemption of the notes, which are to be withdrawn after peace is established. Any ultimate balance is to go to the Imperial Treasury.<sup>5</sup>

Thus the basis for the issue of notes was extended, provision was made for keeping the gold reserve intact, and ample credit facilities were furnished. But although the government and the larger business houses were well cared for by the Reichsbank, and the Darlehnskassen looked after those who wished to raise money on securities or merchants' stocks, neither could be of help to the smaller tradespeople or to those who could only give their personal notes as security. In consequence there arose a demand for Kriegskredit banks. In Berlin, the large private banks and especially the Dresdner and Deutsche banks declared themselves ready to co-operate with the Board of Trade to establish such

<sup>1</sup> Darlehnskassen act, August 4, 1914, secs. 6 and 7.

<sup>2</sup> *Ibid.*, secs. 9, 10, 11.

<sup>3</sup> *Ibid.*, sec. 8.

<sup>4</sup> *Ibid.*, secs. 12-16.

<sup>5</sup> *Ibid.*, secs. 17, 18.

credit institutions. They guaranteed a certain capital and then the Reichsbank was willing to discount to four or five times the amount of the guaranty. The Kriegskredit bank for Berlin was established on August 15, 1914, and by the end of 1915 there were 38 such institutions in various towns in Germany with capitals ranging from 18 million marks in Berlin, to 200,000 marks in Hildesheim. The capital was partly furnished by the state, as in Saxony, or by the municipality, as in Frankfurt, and partly by the boards of trade and other industrial organizations. The institutions are managed by a committee elected by the organizations which have subscribed to the capital. They have no power to issue notes, but carry on their business through the aid of the Reichsbank. They discount bills which arise in the ordinary course of business and also grant book credits. For example, a firm draws on a customer with his permission, discounts the acceptance at the Kriegskredit bank, which rediscounts it at the Reichsbank. This gives the Reichsbank three signatures, that of the drawer, the acceptor, and the Kriegskredit bank. Or the firm may get a loan in the form of a book credit against which it can draw on the Kriegskredit bank, by mortgaging to the bank a sufficient amount of good outstanding debt. In this case the Kriegskredit bank discounts its own acceptance at the Reichsbank. These banks will also lend on personal promissory notes if the borrower can find two well-known persons to guarantee the loan.<sup>1</sup>

The municipalities too have established credit institutions to help the small retailers and handworkers through their co-operative associations. These associations and other interested persons subscribe to a guaranty fund and the city then subscribes usually twice the amount of this fund. Loans are made on much the same terms as at the Kriegskredit banks except that they are usually for smaller sums. There is a credit commission made up of city officials and others who investigate the requests for credit. Rediscounts are obtained from the Kriegskredit banks and from the Reichsbank.

The Darlehnskassen will not accept mortgages as security, but money may be raised upon such security at the mortgage banks which have long been well established in Germany. They will lend

<sup>1</sup> *Bank-Archiv*, XIII, No. 23 (September 1, 1914), p. 383.

up to 50 per cent of the face value of first mortgages held by private persons, after investigation has proved that the loan is not to be used for purposes of speculation.

Thus with thorough German efficiency provision has been made for granting credit to all persons who have any claim to it down to the humblest handworker. It is thus that Germany has been able to avoid a general moratorium; but though thus avoiding one evil, it has been led into a much greater one, in the form of unlimited issues of irredeemable paper money.

#### IV

Much is made in current German publications of the fact that Germany is the only nation at war which has not resorted to a moratorium. To quote Dr. Riesser, writing in August, 1914:

If we succeed in coming through the next twelve or fourteen days without a moratorium, in a time when all our neighbors directly or indirectly affected by the war have proclaimed a moratorium—the once so financially strong England among them—the result will be the greatest economic title to fame for Germany which will naturally find expression in the strengthening of our credit in the whole outside world.<sup>1</sup>

The proclamation of a general moratorium had no place in the system of extensive credits which the Germans had so carefully planned. But though indeed there was no general postponement of debts, special cases have been covered by measures of the Bundesrat. It also seems that the collection of debts has not been pressed. At the beginning of the war appeals were made to the professional and industrial classes to be lenient where possible. Professor Jastrow, in discussing the special cases covered by moratoria writes: "In speaking with business men, one hears that the new ordinances are of no special effect because their clients have for some time lost the habit of paying, and because the manufacturers and dealers know perfectly well that it is not to their interest to ruin their customers."<sup>2</sup>

The Bundesrat was given the power to issue regulations affecting the economic life of Germany during the war.<sup>3</sup> On August 6, 1914, on the strength of this power, the Bundesrat extended the

<sup>1</sup> *Bank-Archiv*, XIII, No. 22 (August 15, 1914), p. 366.

<sup>2</sup> *Archiv für Sozialwissenschaft*, December, 1914, p. 116.

<sup>3</sup> Law of August 4, 1914, *Reichsgesetzblatt*, p. 327, secs. 2 and 3.

time of bills and checks falling due after July 31, 1914, for thirty days.<sup>1</sup> This extension was renewed until May 17, 1915, when a law withdrew any further extensions after June 30, 1915.<sup>2</sup> The civil courts were also empowered to extend the time for payment of any debt contracted before July 31, 1914, for not more than three months on the application of the debtor, if they thought his circumstances justified the order and if the delay would not inflict undue hardship on the creditor.<sup>3</sup> Further, on the motion of the debtor the courts could order that the law should not take its course in case of failure to pay rent, mortgages, or interest. Such debts could be extended for three months;<sup>4</sup> and by later legislation the payments on mortgages and debts for land could be extended for six months.<sup>5</sup> The processes by which the courts could grant these extensions were made cheaper and more simple than the usual court proceedings.<sup>6</sup>

Thus while it is true that no general moratorium was proclaimed, in reality there is only this difference between the moratorium in England and that in Germany: that, while in England an extension of time was allowed on all debts, in Germany each case had to be dealt with separately by the courts (except in the case of bills and checks); and in the long run, the German provisions have been more lenient with regard to persons who are carrying mortgages or who are in debt for land or rent, than those made in England. Moreover, is not the non-redemption of Reichsbank and Imperial treasury notes a form of moratorium in favor of the government?

## V

We have seen that the Reichsbank was the pivotal point of the German financial system. As the *Report* of the Reichsbank explains the situation:

Germany more than almost any other country has erected its economic structure upon credit; more than any other country it has concentrated the ready money and promotions of enterprise of individuals in credit institutions, credit and mortgage banks, savings banks, co-operative societies, etc. Through

<sup>1</sup> *Reichsgesetzblatt*, p. 357.

<sup>2</sup> *Ibid.*, pp. 284 f.

<sup>3</sup> Law of August 7, 1914, *ibid.*, p. 359.

<sup>4</sup> Law of August 18, 1914, *ibid.*, p. 377.

<sup>5</sup> Law of December 22, 1914, *ibid.*, p. 543.

<sup>6</sup> Law of April, 1915, *ibid.*, p. 233.

the outbreak of the war a heavy burden was thrown upon the whole credit structure. As the other sources of credit were in part rarely in a position to grant new credits, in part completely unable to do so, the general and pressing need for credit was forced to seek its satisfaction in the Reichsbank as the final source of credit in the country.<sup>1</sup>

In the first six days of mobilization the Reichsbank supplied the government with 750 million marks, including token money and gold.<sup>2</sup> For the first two months of the war four and a half milliard<sup>3</sup> marks were necessary; two milliards for the army and navy, two milliards for the needs of industry, trade, and agriculture, and five hundred million to meet the so-called *Angstbedarf*, the panic demands, which showed themselves in the withdrawal of deposits, in the discounting of bills in amounts larger than the sums actually needed at the time, and in the endeavor to obtain loans.<sup>4</sup>

How did the Reichsbank meet these demands? On August 2, 1914, the "war treasure" of 205 million marks in gold was transferred to the bank. Again on August 7, 35 million marks of Imperial treasury notes, and 11.8 million marks in silver and token money were deposited by the government to the credit of the Empire. This made a total of 251.8 million marks handed to the Reichsbank by the government in the first week of August.<sup>5</sup>

The accounts of the Reichsbank immediately before and after the war are shown in Table I.<sup>6</sup> The transfer of the "war treasure" accounts for the increase in the gold reserve as it offset the gold which the bank lost through withdrawals before it ceased to redeem its notes.

The first credits for the government were arranged largely by the discounting of Imperial treasury bills. This is clearly seen in

<sup>1</sup> *Report of the Reichsbank for 1914*, translation in *Bankers' Magazine*, London, October, 1915, p. 515.

<sup>2</sup> Buff, *Annalen des Deutschen Reichs*, No. 2/3 (April, 1915), p. 106.

<sup>3</sup> On account of ambiguity in the use of the term "billion," it seems best to retain the German term "milliard" in the sense of a thousand million.

<sup>4</sup> H. Böttger, *Das Geld im Kriege*, p. 10, in series "Der Deutsche Krieg," No. 26 (Berlin: Ernst Jäckh, 1914).

<sup>5</sup> *Report of the Reichsbank for 1914*, translation in *Bankers' Magazine*, London, October, 1915, p. 517.

<sup>6</sup> Jastrow, *Im Kriegszustand*, p. 36.

the item "bills and checks." As we have noted, after August 4, these treasury bills were put on an equality with commercial paper in the business of the Reichsbank. The bank also made advances to the government on the so-called war duty bills. These were bills drawn in favor of the Empire by those who took advantage of the

TABLE I

## ASSETS

	IN MILLION MARKS			
	July 23	July 31	August 7	August 15
Total reserve.....	1691.4	1528.0	1596.6	1590.2
Gold reserve.....	1356.9	1253.2	1477.6	1508.5
Imperial treasury notes*...	65.5	33.4	96.7†	126.8†
Notes of other banks.....	40.1	11.5	22.8	31.8
Bills and checks.....	750.9	2081.1	3737.1‡	4426.0‡
Loans on security.....	50.2	202.2	226.3	181.0
Stocks.....	330.8	396.6	194.2	200.6
Other assets.....	200.4	218.1	237.7	222.0

## LIABILITIES

Capital.....	180.0	180.0	180.0	180.0
Surplus.....	74.5	74.5	74.5	74.5
Notes in circulation.....	1890.9	2909.4	3897.2	3881.9
Deposits.....	944.0	1258.5	1879.5	2551.8
Other liabilities.....	40.0	48.6	79.2	90.3

\* Imperial treasury notes (*Reichskassenscheine*) are the only paper money issued by the German government. These notes were first authorized by the Law of April 30, 1874. The total issue was limited to 120 million marks. The law of July 3, 1913, authorized a second 120 million marks and a third 120 million marks were authorized by the law of March 22, 1915. This last 120 million marks must be covered by minted German money or Darlehnskassen notes. The amount of cover required is not stated.

† Including Darlehnskassen notes.

‡ Including Imperial treasury bills. Imperial treasury bills (*Reichsschatzanweisungen*) are short-time bills which the government has used to raise money by either selling them in the open market or discounting them at the Reichsbank.

orders relating to the postponement of payments of customs and Imperial taxes in parts of the Empire threatened by invasion. These bills were indorsed at the Imperial Treasury and discounted at the Reichsbank if they were due within three months. By December, 1914, the government had thus borrowed at the bank by discounts 329 million marks and by advances 165 million marks.<sup>1</sup>

<sup>1</sup> Report of the Reichsbank for 1914, translation in *Bankers' Magazine*, London, October, 1915, p. 520.



In the accounts, the item "discounts on security" falls after August 7, because up to that date the Reichsbank was doing business afterward taken over by the Darlehnskassen. Imperial treasury bills also are no longer placed under this item but are included with "bills and checks" as in the foregoing account. Among the securities now discounted the vouchers issued by the commission for buying war materials are interesting.<sup>1</sup> These vouchers are paid in normal times only at the district treasury and after the long delay required to verify the accounts. As this waiting, under present conditions, entailed hardship upon the holders, the Reichsbank undertook to discount them. Large advances have also been made to private firms in connection with war orders. According to President Haverstein the Reichsbank has extended credit wherever there was a sound and reasonable demand.<sup>2</sup> The official bank rate has not been raised to any extent. It had been 4 per cent since February, 1914. On July 31, 1914, it was raised to 5 per cent, and on August 1, to 6 per cent, where it remained until it was lowered to 5 per cent on December 23, 1914.

The loans granted by the bank have been paid largely in Reichsbank notes, and hence there has resulted the increase in notes in circulation. The amount has gone up continuously, with sudden jumps during the months in which the war loans have been paid. The average note circulation for 1913 was 1,958 million marks; for 1914, up to July 23, it was 2,000 million marks; from July 23 to the end of the year, 4,100 million marks; and for 1915, 5,379 million marks. On February 29, 1916, there were 6,554 million marks of notes in circulation. And yet the note issues are not so large as they might have been. An arrangement for making payments in Belgium has been devised which eliminates the necessity of a certain amount of Reichsbank notes and thus helps to improve the accounts of the bank. Payment for merchandise bought in Belgium is made by crediting the seller on the books of the Reichsbank. On the strength of this credit he can receive payment in the notes of the Société Générale de Belgique which the Germans have made the official bank of Belgium. At the same time this German

<sup>1</sup> *Report of the Reichsbank for 1914*, p. 522.

<sup>2</sup> *Münchener Zeitung*, September 29, 1914.

debt may serve the Société Générale as the basis for the issue of a triple amount of notes. Thus the necessity of making payments in Belgium has not only been ingeniously circumvented by the German authorities, but at the same time German credit is forming the basis for note issues of the Belgian bank.<sup>1</sup>

Besides the Reichsbank notes there are also the Darlehnskassen notes in circulation. A good proportion of these notes are held by the Reichsbank. The amount in the bank at the end of each week from September, 1914, until the end of June, 1915, is shown by Tables V and VI. In the accounts of the Reichsbank the Darlehnskassen notes are grouped with the Imperial treasury notes so that the amount of Darlehnskassen notes held by the Reichsbank at any date can only be ascertained later from the reports of the Darlehnskassen. In 1915 the Reichsbank held the largest amount of these notes at the end of October, when it had 903 million marks of them. These notes have been issued in small denominations and have to some extent taken the place of the silver and gold formerly in circulation.

The deposits of the Reichsbank rose in a remarkable manner after the outbreak of the war, on account, no doubt, of the increased number of loans granted in the form of deposit accounts. This in no way represents the actual depositing of money in the bank, but is evidence of the large amounts that the Reichsbank is loaning. In the last week of July, 1914, deposits rose by 300 million marks. In preparation for the first war loan in September, 1914, they reached 3,709 million marks but dropped again by November 7, to 1,281 million marks. That figure, however, is still 200 million marks higher than the highest amount reached at any time before the war.

But though the note circulation and the discounts and deposits have advanced in an extraordinary way, perhaps the most characteristic feature of the accounts of the Reichsbank is the steady rise in the gold reserve. This reserve, 1,356 million marks on July 23, 1914, was reduced by withdrawals to 1,253 million marks on July 31. Further withdrawals were prevented by the law relieving the bank from redeeming its notes. On August 2, as we have seen,

<sup>1</sup> *Bank-Archiv*, XIV, No. 24 (September 15, 1915), pp. 410-11.

the "war treasure" was brought to the bank, and by August 7 the gold reserve reached 1,477.5 million marks. From that date it has continued to rise. A remarkable campaign for gold has been carried on. Every effort has been made through the newspapers, the clergy, teachers, and officials, to induce people to bring what gold they have to the Reichsbank and receive bank notes in exchange. The success of this campaign can be seen from a perusal of Table II, which shows the increase in the gold reserve during certain periods of 1914. The average amount of gold held by the Reichsbank in 1912 was 776 million marks; in 1913, 1,179 million marks; in 1914, 2,092 million marks; and in 1915, 2,356 million marks. On February 29, 1916, there were 2,557 million marks in the gold reserve.

TABLE II

Date	Increase of Gold Reserve in Millions of Marks
July 31–August 7 . . . . .	224.3
August 15–September 7 . . . . .	102.6
October 15–November 7 . . . . .	190.5
December 1–December 15 . . . . .	18.2
December 15–December 31 . . . . .	61.7

The *Report of the Reichsbank for 1914* dilates upon the fact that people were willing to bring gold to the bank and exchange it for bank notes:

That during a war crisis of such severity the population should bring of their own free will to the central note-issuing bank, the gold in their possession and demand notes in exchange is without parallel in the monetary and banking history of any bank or people and is overwhelming proof not only of the unshakable credit of the Reichsbank notes, but also of the strength of the reserve gold coin in the country and of the economic intelligence and capacity for self-sacrifice among our people.<sup>1</sup>

But these words could be applied as well to France and the Bank of France; for an exactly similar collection of gold has been taking place there in the last year. Dr. Helfferich has taken pains to explain that the gold was brought voluntarily under the influence of well-organized enthusiasm but without any exertion of force.<sup>2</sup> In the face of these remarks, it is strange that by the recent action

<sup>1</sup> *Report of the Reichsbank for 1914*, translation in *Bankers' Magazine*, London, October, 1915, p. 517.

<sup>2</sup> Helfferich, speech in Reichstag, March 10, 1915.

of the Reichsbank, people using safety deposit vaults are required to sign a statement to the effect that they are not hoarding gold.<sup>1</sup>

From August 7, 1914, until the end of March, 1915, the average weekly gain in gold was 23,184 marks. After the first week in May there was a decrease in the gain, and the average gain from May 1 to December 31, 1915, was 2,349 marks a week. The total gold reserve continues to rise. It has been suggested that gold was being transferred to Berlin from the Bank of Austria which had 1,589 million kronen in gold before the war. Since August, 1914, the Austrian bank has published only a very general annual statement, so that it is impossible to say how much gold it has today. This theory, however, was important enough to be ridiculed by Dr. Helfferich as highly absurd.<sup>2</sup> But the Amsterdam correspondent of the *London Economist* insisted that some of the gold sent from Berlin to Holland has been in Austrian coin. As is the case with many other explanations and theories, the truth can be known only after the war is well over.<sup>3</sup>

TABLE III

Date	Gold Cover for Notes	For Notes and Deposits
1914	Per Cent	Per Cent
July 23.....	71.8	46.9
July 31.....	43.1	29.7
August 7.....	38.2	27.9
August 15.....	36.8	28.9
September 7.....	42.2	24.2
November 23.....	48.6	35.9
December 31.....	41.5	31.8
1915		
January 30.....	46.4	35.4
March 31.....	41.5	23.9
May 31.....	44.6	34.8
June 30.....	40.9	28.6
August 31.....	43.3	33.0
September 30.....	39.2	22.8
November 30.....	40.7	32.0
December 23.....	38.9	29.2

Table III gives the gold cover for the Reichsbank notes in circulation and for the notes and deposits, at typical dates in 1914 and 1915. It will be noticed that the gold cover for notes and

<sup>1</sup> *Bank-Archiv*, XV, No. 6 (December 15, 1915), p. 105.

<sup>2</sup> Helfferich, speech in Reichstag, August 20, 1915.

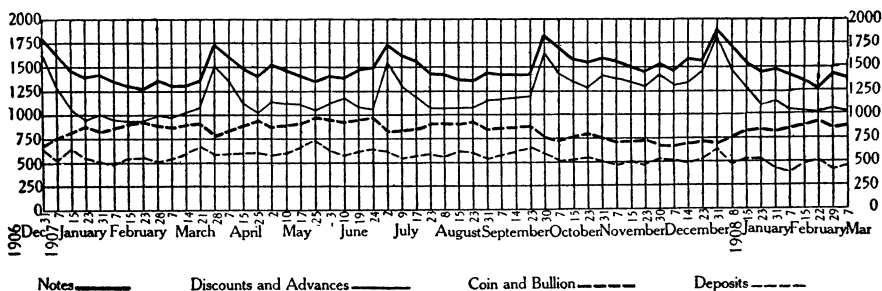
<sup>3</sup> *London Economist*, LXXX (January 30, 1915), p. 190.

deposits fell decidedly in March and September when preparations were being made to pay the war loans, and the Reichsbank was lending extensively to aid people to meet their subscriptions.

The enormous increase in the operations of the Reichsbank can be readily seen by comparing the two charts on pp. 532 and 533, showing the accounts of the Reichsbank during the panic of 1907, when its business was considered to be greatly expanded, and those since the outbreak of the war. These charts are drawn on the same

CHART I

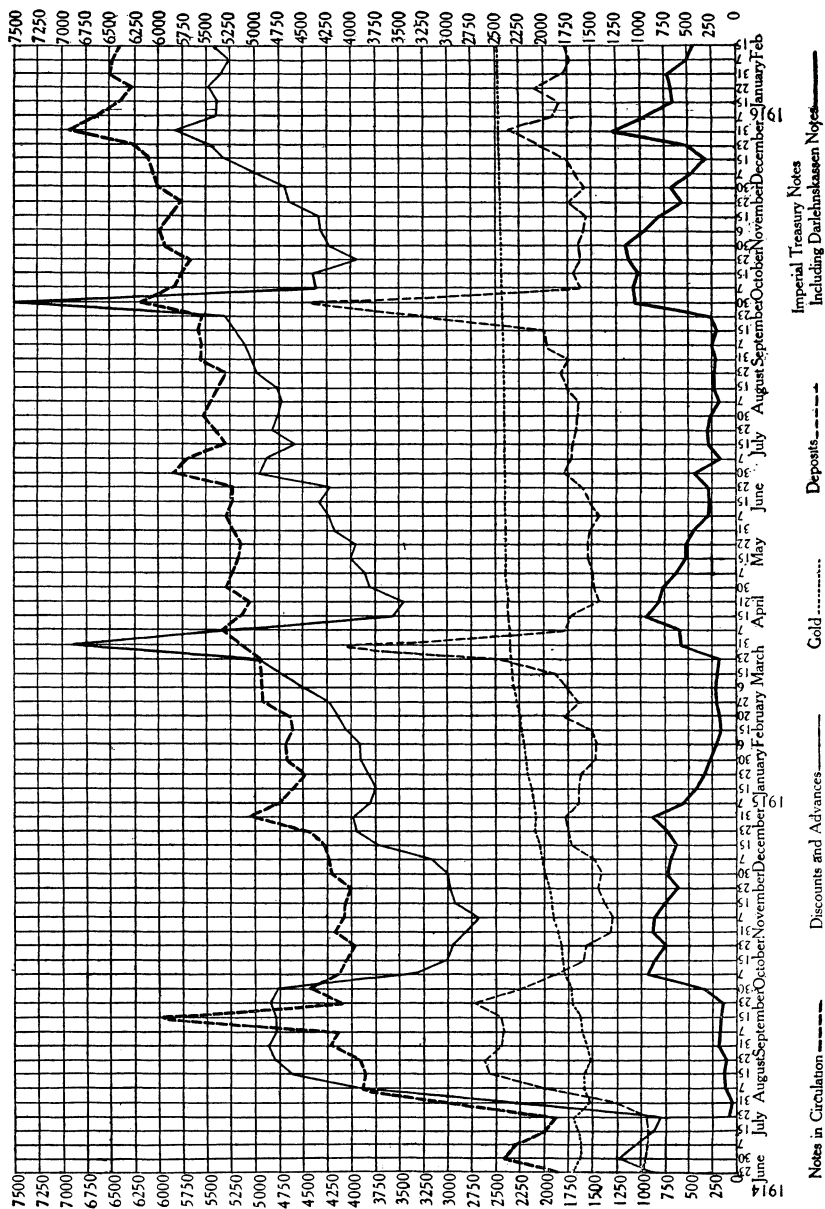
WEEKLY MOVEMENT OF THE PRINCIPAL ITEMS OF THE REICHSBANK, 1907



scale. In 1907 there was no issue corresponding to the Darlehnskassen notes. There were on the average, in 1915, 700 million of these notes in circulation. From July 23, 1914, to the end of December, 1915, the Reichsbank notes increased by some 4,379 million marks, reaching the huge sum of 6,270 million marks in December, 1915.

The Reichsbank has been able to maintain the one-third cash cover for its notes without including the Darlehnskassen notes in the cover. But it must always be remembered that while all the forces have been working to draw gold to the bank there has been no necessity of paying any out. Yet the increase in the gold reserve since July 23, 1914, is only 749 million marks as against an increase of 2,379 million marks of Reichsbank notes, omitting from consideration the Darlehnskassen and Imperial treasury notes whose redemption is really dependent upon the same gold fund.

CHART II  
WEEKLY MOVEMENT OF THE PRINCIPAL ITEMS OF THE REICHSBANK AFTER THE OUTBREAK OF THE WAR



The fact that there is a large gold reserve does not settle the problem, especially when the gold has been collected under such unusual circumstances. It is not so much a question of comparing the volume of currency with the amount of the gold reserve as of comparing it with the volume of currency which was necessary for the transaction of business in the usual way with the notes redeemable in gold.

## VI

By the end of 1915 the Reichstag had voted war credits to the amount of 40 milliard marks as follows:

August 4, 1914.....	5 milliard marks
December 13, 1914.....	5
March 10, 1915.....	10
August 20, 1915.....	10
December 14, 1915.....	10

On the strength of these grants three loans have been floated, in September, 1914, March, 1915, and September, 1915. The amounts subscribed and the general conditions under which these loans were raised can be obtained from Table IV. The advances made by the Darlehnskassen in connection with these loans is shown in Tables V and VI.

The municipalities have also subscribed large amounts to the loans, which is rather to be wondered at as they have been under heavy expenses and have had to increase their taxation to meet expenses.<sup>1</sup> For all three loans registered bonds were sold at a slightly lower price on condition that they should not be sold for several months.

Perhaps the most comprehensive statement of the general conditions can be obtained from Dr. Helfferich's speeches in the Reichstag. In his first speech on March 10, 1915, he explained that the government was continuing to pay off the public debt as it fell due. The interest on the first war loan was being met out of ordinary revenue, as the government did not desire to pay interest by piling up new debt. He urged the necessity of saving: Germany

<sup>1</sup> The *Continental Times*, September 24, 1915, gives a list of subscribers to the third war loan. Among other municipalities Hamburg took 460 million marks, Frankfurt 455 million marks, and Hannover 334 million marks.

TABLE IV  
THE GERMAN WAR LOANS\*

	First War Loan	Second War Loan	Third War Loan
Amount offered for public subscription	1,000 million marks in treasury bills; unlimited amount of Imperial loan not payable before October 1, 1924	Unlimited amount of treasury bills and Imperial loan, not payable before October 1, 1924	Unlimited amount of Imperial loan not payable before October 1, 1924
Date of receiving subscriptions	September 10-19, 1914	February 27—March 15, 1915	September 4-22, 1915
Rate of interest	5 per cent, payable April 1 and October 1	5 per cent, payable January 2, and July 1	5 per cent, payable April 1 and October 1
Agencies for receiving subscriptions	Reichsbank and its branches, Seehandlung, Prussian Central Genossenschaft in Berlin, royal bank in Nuremberg. All German banks and bankers, public savings banks, and all life insurance offices in Germany	The same and also all German credit co-operative societies, and, in places where there is no savings bank, the post-office	The same and also all post-offices, and in Prussia all public state offices
Total amount subscribed	4,460 million marks	9,103 million marks	12,107 million marks
Number of persons subscribing from 100 to 2,000 marks	926,959	2,113,220	2,883,799
Amount subscribed in blocks of 100-2,000 marks	734 million marks	1,662 million marks	2,165 million marks
Large subscribers:			
Reichsbank . . . . .	479 million marks	565 million marks	569 million marks
Public savings banks . . . . .	883	1,977	2,877
Life insurance companies . . . . .	203	384	417
Credit societies . . . . .		430	680
Banks and bankers . . . . .	2,895	5,592 (61.4 per cent of the total)	7,391 (61.07 per cent of the total)
Management of the post-office		112	167
Soldiers in the field . . . . .	Some 20 million marks	Some 30 million marks	Not ascertained

\* *Bank-Archiv*, XV, No. 2 (October 15, 1915), p. 31.



TABLE V  
DARLEHNSKASSEN AND THE FIRST WAR LOAN\*  
(Figures in million marks)

DATE	DARLEHNSKASSEN			FIRST WAR LOAN		
	Loans Outstanding at the Given Dates	Darlehnskassen Notes at the Given Dates		Payments Made by All Subscribers up to the Given Dates	Percentage of Total Loan	Advances by Darlehnskassen to Subscribers at the Given Dates
		In the Reichsbank	In Free Circulation			
Sept. 7..... 15..... 23..... 30.....	242.9	151.7	91.0	.....	.....	.....
	255.2	147.4	107.3	.....	.....	.....
	205.6	143.1	121.6	.....	.....	.....
	478.9	334.1	142.9	.....	.....	.....
	1,115.7	945.4	160.6	.....	.....	.....
Oct. 7..... 15..... 23..... 31.....	1,014.9	829.3	184.7	2,420.0	.....	710.4
	946.7	737.2	208.8	.....	.....	593.5
	1,110.9	866.5	243.5	3,087.0	68.9	533.6
	1,120.5	855.1	264.9	3,520.7	78.6	778.3
	1,036.7	754.0	282.0	3,578.2	79.9	801.3
Nov. 7..... 15..... 23..... 30.....	893.9	594.8	298.2	3,673.9	82.0	750.4
	1,002.3	739.2	322.8	3,769.9	84.1	651.1
	1,032.1	687.0	345.0	4,103.7	91.6	807.4
	989.6	622.3	366.7	4,163.8	92.9	768.9
	1,149.2	749.2	399.8	4,209.0	94.0	729.1
Dec. 7..... 23..... 31.....	1,317.2	871.2	445.8	4,481.0	100.0	880.4
	.....	.....	.....	.....	.....	.....
1914	.....	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....
1915	.....	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....

\* Volkswirtschaftlicher Chronik, May, 1915, p. 342. In *Jahrbücher für Nationalökonomie und Statistik*. 105 Band, III Folge, 50 Band, Erstes Heft, July, 1915.

TABLE VI  
DARLEHNSKASSEN AND THE SECOND WAR LOAN\*  
(Figures in million marks)

DATE	DARLEHNSKASSEN				SECOND WAR LOAN			
	Loans Outstanding at the Given Dates	Darlehnskassen Notes at the Given Dates			Payments Made by All Subscribers up to the Given Dates		Advances by the Darlehnskassen to Subscribers at the Given Dates	
		In the Reichsbank	In Free Circulation	Reserved on Account of the Law of March 22, 1915, as Cover for Imperial Treasury Notes	Total Amount	Percentage of Total Loan	Amount	Percentage of Total Amount Paid up to the Given Dates by All Subscribers
1915								
Jan. 7.....	997	541	456	.....	4,105	45.1	217	5.3
15.....	868	406	462	.....	6,076	61.7	521	8.6
23.....	784	316	468	.....	6,579	72.3	492	7.5
31.....	745	259	486	.....	6,836	75.1	491	7.2
Feb. 7.....	700	194	506	.....	7,193	79.0	443	6.2
15.....	665	147	518	.....	7,461	82.0	411	5.5
23.....	709	180	529	.....	7,830	86.0	536	6.8
28.....	759	209	550	.....	8,090	87.6	502	6.3
March 7.....	766	196	570	.....	8,240	88.8	438	5.4
15.....	759	177	582	.....	8,502	90.5	412	5.0
23.....	753	165	588	.....	8,568	93.4	503	5.9
31.....	1,183	556	629	.....	.....	94.1	495	5.8
April 7.....	1,229	582	647	.....	.....	.....	.....	.....
15.....	1,574	932	638	4	.....	.....	.....	.....
23.....	1,424	782	634	8	.....	.....	.....	.....
30.....	1,413	752	649	12	.....	.....	.....	.....
May 7.....	1,284	610	656	18	.....	.....	.....	.....
15.....	1,182	492	664	26	.....	.....	.....	.....
23.....	1,188	495	659	34	.....	.....	.....	.....
31.....	1,134	417	675	42	.....	.....	.....	.....
June 7.....	990	267	681	51	.....	.....	.....	.....
15.....	968	227	680	61	.....	.....	.....	.....
23.....	1,051	301	680	70	.....	.....	.....	.....
30.....	1,259	477	706	76	.....	.....	.....	.....

\* Volkswirtschaftlicher Chronik, June, 1915, p. 415. In Jahrbücher für Nationalökonomie und Statistik. 105 Band, III Folge, 50 Band, Zweites Heft, August, 1915.

has use for all available capital in industry and agriculture. In outlining his general policy, Dr. Helfferich showed that every effort had been made to economize in the usual government expenditures, but the revenue had also been reduced. As far as taxation was concerned, the Imperial government did not intend to add to the war burdens by increasing the existing taxes or by levying new ones, so long as the ordinary expenditures could be met from income. Indemnities also could be expected which would be used to pay off the debt at the end of the war. The heaviest taxes which could be paid would cover but a small percentage of the war expenses, and as the war was being fought for the future as well as for the present he thought it only just that future generations should bear their share if necessary. "As things are in this war, the cost must practically be met by loans, bank notes, and paper money."<sup>1</sup>

On August 29, 1915, Dr. Helfferich, in speaking of the conditions under which the third war loan would be floated in September, said that instalment payments would be permitted even for those subscribing less than 1,000 marks.

We hope further, after some interesting and effective examples in connection with the last war loan, to induce employers of labor to make advances to their workmen and employees, in order to enable them to subscribe small amounts. In the case of large subscribers we shall simplify the work of payment by accepting at a reduction of 5 per cent, the non-due, non-interest-bearing Imperial treasury certificates which have been issued for purchases, in order to minimize, so far as possible, the movement and disturbances of the money market.

To what extent these certificates were used in paying for the third war loan it is not stated, but so far as they were used, the amount subscribed represents merely the funding of a government debt and not the turning over of new funds to the government. After the September loan it was expected that no further loan would be necessary until March, 1916.<sup>2</sup> If further funds were needed in the meantime, they could be obtained by discounting treasury

<sup>1</sup> A law of December 28, 1915, required all business houses and factories to put aside one-half of their increased profits and to hold this sum in readiness for a tax. Dr. Helfferich, however, says that the tax will not be collected until after the war.

<sup>2</sup> Helfferich, speech in Reichstag, December 14, 1915.

bills at the Reichsbank, which has been the general method employed when the proceeds of the loans have been exhausted.

In considering where the huge sums have come from to pay for the great amounts subscribed, it must be remembered that the German system of war finance with its extensive credit system was devised with the idea of carrying on a war by floating loans. The Reichsbank and the various credit institutions have given every aid to persons subscribing to war loans. Of course, too, all classes are practicing rigid economy and have reduced their expenditures, and it must also be remembered that the German nation is practically on a system of rations since the advent of the bread and "grease" tickets, so that in certain directions people have to save whether they wish to or not. Also the war must have liberated some capital which had been formerly used in speculation on the Bourse, for all such business has been frowned upon by the authorities. Foreign securities too have been largely sold abroad. Wages have risen in some employments and "all available money today belongs to the Fatherland and the place to invest it is in war loans."<sup>1</sup>

But above all, Germany is today using inconvertible paper money. It is as easy to provide a large as a small amount. The government pays out the paper money which it has obtained from the Reichsbank, for war materials, wages, etc. Part of this money comes back to it in the form of subscriptions to the loans. When the loans are exhausted, it obtains more paper money from the Reichsbank by discounting Imperial treasury bills which represent no real wealth. The money thus procured is again paid out and again the circle is completed. Each time there is a larger total amount of paper money in the country and each time it is easier to increase the sum subscribed to the new loan.

## VII

These huge sums have been readily voted by the Reichstag, but after the war the more difficult question of paying off the debt, or even of meeting the interest, will have to be faced. Germany and

<sup>1</sup> Helfferich, speech in Reichstag, August 20, 1915.

Austria are spending some five million marks a day on the war.<sup>1</sup> Of course by far the greater part of this burden is being borne by Germany, whose war expenditure is at the rate of 14 milliard marks a year. This is solely for the actual expenses of the army and navy. Enormous sums have also to be spent on pensions, aid to soldiers' families, rehabilitation, and kindred items. The states and municipalities too are under heavy expenses. In 1914 Prussia spent 400 million marks to repair the damage done in East Prussia. In October, 1914, the Prussian Abgeordnetenhaus voted a credit of 1½ milliard marks to make up the decrease in the revenue and to cover extraordinary outlays for unemployment, war relief, and the support of soldiers' families.<sup>2</sup> At this date Berlin was spending 800,000 marks a month on the unemployed.<sup>3</sup> To cover these expenses the municipalities have resorted to increased taxation, but the states are relying upon loans.<sup>4</sup>

The Imperial revenue has fallen off. The tariff usually accounts for 40 per cent of the income from taxation; but now most of the agricultural tariff has been suspended and in any case foreign trade is so limited that revenue from tariff is practically negligible. The tax on the consumption of sugar could perhaps be raised, but this would not make up the deficit. The stamp taxes on legal documents and railway tickets are bringing in very little, as transportation, except for military purposes, is reduced; the Bourse is practically closed and there are few real estate sales. The income from the government railways has also, naturally, fallen off. No figures could be found for the income from the *Wehrbeitrag* and the inheritance taxes for 1915. They are practically the only Imperial taxes, outside of the consumption taxes on sugar and salt, which can be bringing in revenue. By great economy, however, Dr. Helfferich claims that the ordinary expenditures of the government are still being met from current revenue.<sup>5</sup>

<sup>1</sup> Helfferich, speech in Reichstag, December 14, 1915.

<sup>2</sup> Frhr. von Zedlitz und Neukirch, *Reichs- und Staatsfinanzen im Kriege*, p. 21.

<sup>3</sup> *Die Hilfe*, October 22, 1914.

<sup>4</sup> Helfferich, speech in Reichstag, August 20, 1915.

<sup>5</sup> Helfferich, speech in Reichstag, March 10, 1915.

Before the war the Imperial debt was 5,000 million marks. In 1913, payments for debt which fell due took 238 million marks, or 20 per cent of the expenditure on permanent account. The interest on the first war loan is 220 million marks a year. On the 40 milliard marks which have been voted so far, the interest will be 2,000 million marks. This sum is to be compared with the total Imperial revenue for 1913-14 which was 3,193 million marks.

In 1913 Dr. Helfferich estimated the national wealth of Germany at more than 300 milliard marks; her national income at 40 milliard marks a year, of which some 7 milliard marks were devoted to public purposes, some 25 milliard marks to private consumption, and the remaining 8 or  $8\frac{1}{2}$  milliard marks, which the automatic increase of existing property values raised to 10 milliard marks, were added annually to the national wealth.<sup>1</sup>

Of the annual income two-eighths came from agriculture, three-eighths from industry, one-eighth from transportation and trade, and two-eighths from professional services and returns from investments. The income from agriculture will not be changed to any extent by the war, but the income from industry and from transportation and trade will probably be reduced by one-half, and that from professional services and investments by one-third, making a total decrease of one-third in the entire national income. Thus, with an annual war expenditure of 14 milliard marks and a decrease of 13 milliard marks in income, there is a total loss to the German people of 28 milliard marks a year.<sup>2</sup>

And after the war the income will not immediately regain its former amount. The industrial life of Germany has been more disturbed than that of the other belligerents, her foreign trade has been stopped and it will take some time to win again what has been lost. The margin of income which would permit greatly increased taxation will not be easily produced. Then too the great loss of the labor power of the country must be considered, and many of those who do return from the war will be less efficient producers than they formerly were.

<sup>1</sup> Helfferich, *Germany's Economic Progress and National Wealth* (Berlin: Georg Stilke, 1913), p. 123.

<sup>2</sup> Dr. J. Wolf, *Die Kriegsrechnung* (Berlin: Georg Reimer, 1914), pp. 33-37.

The whole German financial plan seems to have been built on this idea: a short, brilliant war and a large indemnity. Dr. Helfferich mentions the indemnities as a reason for not increasing taxation.

If God gives us the victory and with it the occasion of shaping the peace according to our needs and our vital necessities, then we will not, indeed, we may not, along with all other factors, forget the question of costs; we owe that to the future of our people. The entire future manner of life of our people must, so far as it is in any way possible, remain free and be liberated from the tremendous burden which the war is piling up. The inciters of the war have earned for themselves the leaden weight of the billions. Let them, not us, carry it through the decades.<sup>1</sup>

A long war was not considered possible. "A war of a year's duration can scarcely be considered in spite of the chatter of the *Times* and other English papers who speak as if England and her allies could continue the war for five or ten years."<sup>2</sup> But a system which may have worked perfectly well under the premises from which it was deduced, may be an utter failure, given different conditions.

### VIII

A serious question at present is that of the depreciation of the Reichsmark. There are three generally accepted tests for currency-depreciation: (1) a premium on gold, (2) a dislocation of the foreign exchanges, and (3) rise in the general level of commodity prices.<sup>3</sup> All three conditions are present in Germany today. The first two are closely related.

The exchanges have been against Germany since July, 1914. The price of foreign money as registered in the open market was quoted in the *Frankfurter Zeitung* until November 11, 1914, when at the suggestion of the authorities all mention of the exchanges ceased. The government has fought against the premium on gold. As early as September, 1914, a proclamation was issued by the military governor of the Berlin district condemning the practice of buying up gold. It stated that people were going to restaurants

<sup>1</sup> Helfferich, speech in Reichstag, August 20, 1915.

<sup>2</sup> Dr. J. Wolf, *Die Kriegerrechnung*, p. 37 (speech given in Berlin, September, 1914).

<sup>3</sup> See A. C. Whitaker, "Currency Depreciation in Time of War," *Quarterly Journal of Economics*, XXX (February, 1916).

and offering high prices in paper money for any gold that could be collected from the guests. On November 23, 1914, the Bundesrat prohibited the export of gold under a penalty of one year's imprisonment and a fine, and also forbade the purchasing of gold at a premium.

By December, 1914, the currency as expressed in the foreign exchanges was depreciated 10 per cent, in spite of the fact that 47 per cent of the note issue of the Reichsbank was covered by gold. The exchanges fluctuated widely during the winter, but became steadier in the spring, largely on account of the export of dyes, which fetched a high price, and of machinery to Roumania and Scandinavia. Coal also was sent to Italy until that country joined the Allies on May 31, 1915. Some gold was sent to Holland, and foreign securities held in Germany were sold abroad in large amounts. But while this had some effect in steadying the exchanges, they remained well below par. Tables VII-IX will give some idea of their course.<sup>1</sup> Quotations are in pfennigs and from the point of view of Berlin.

TABLE VII

	Par	December 2, 1914	April 12, 1915	May 29, 1915	July 12, 1915
Holland.....	170	190.25	194	194.25	197.50
New York.....	420	469	493	487	492
Scandinavia.....	112.50	118	128.50	128.50	128
Italy.....	80	87.25	85.25	.....	.....
Switzerland.....	80	90.50	92	92.50	91.25

Table VIII shows the recent percentage of depreciation of the mark in Amsterdam.

TABLE VIII

	1915	Depreciation Per Cent
November 20.....	1915	19.0
29.....	1915	20.1
30.....	1915	20.6
December 6.....	1915	21.2
14.....	1915	25.9
21.....	1915	26.1
27.....	1915	26.4
31.....	1915	28.5
January 6.....	1916	33.0

<sup>1</sup> Figures taken from the *London Economist*, Vols. LXXIX-LXXXIII, 1914, 1915, 1916.



In other neutral countries the Reichsmark showed the depreciation given in Table IX.

TABLE IX

	December 31, 1915	January 31, 1916
	Per Cent	Per Cent
Berne.....	19.	22.50
Christiania.....	22.50	24.43
Copenhagen.....	22.50	24.6
Stockholm.....	23.30	25.
New York.....	19.80	22.04

In December, 1915, the German 5 per cent war loan was offered in New York at a price which showed a depreciation of 25 per cent. One thousand marks were offered for \$202.50. Before the war they would have been worth \$237. The Imperial 4 per cent bonds were offered at the same time at the rate of 1,000 marks for \$185.50. From Germany we can obtain no figures. Although business is being done on the Bourse under certain regulations, no quotations are made, and it is against the law to make public the price of securities or of foreign money, or to issue estimates which would form the basis for a price.<sup>1</sup>

It is claimed that since Germany is practically in a state of isolation the foreign exchanges alone are not a perfect index of the internal currency of the country. Yet why should the exchanges go steadily against a country which is largely shut off from foreign trade and thus from the possibility of a great excess of imports?

There is also the rise in the general level of prices to be considered. Prices have been regulated by the Imperial authorities since the beginning of the war. Maximum prices for many food-stuffs and metals have been fixed, and in some cases the distribution of the supplies is looked after by an Imperial commission. But in spite of the ingenuity of the government the natural results of paying war liabilities with great issues of inconvertible money are being felt. The whole rise in prices cannot be laid to scarcity caused by the blockade. Wheat and rye crops were good in 1914 and 1915. In normal times 15-20 per cent of the wheat consumed

<sup>1</sup> Law of February 25, 1915, *Reichsgesetzblatt*, pp. 11 f.

is imported, but rye is exported. Of the cattle imported one-half come from Denmark, and this trade no doubt continues. There have also been large importations of wheat from Roumania and there seems to be some illicit trade in grain with Russia via Roumania. Moreover, in the attacks upon the English policy of an economic war there has been no mention of the civilian population actually having experienced want. However, investigations conducted by *Vorwärts* in September, 1915, showed that the price of food had increased 85 per cent in Berlin since the beginning of the war. The prices of 52 common articles of food were taken from the price lists of the large co-operative stores and the aggregate cost of one pound of each article was found to have been 35 marks in August, 1914, but to have increased to 65 marks in August, 1915. The official index number for food prices in Berlin also shows an increase of 82 per cent between July, 1914, and December, 1915.<sup>1</sup> It does not seem possible that all of this increase can be due to scarcity of food. Some of it, at least, we must attribute to depreciation of the Reichsmark.

Dr. Helfferich has attempted to explain the unfavorable exchanges.<sup>2</sup>

Foreigners think that it means a depreciation of the Reichsmark. We cannot deny that we have to pay more for the Swiss franc, the Dutch gulder, the Scandinavian crown, and the American dollar than in normal times. The rise of the foreign rate of exchange, in my opinion, is in no way connected with the internal strength of our financial position. It depends simply upon certain technical points of our foreign trade. In normal times Germany can pay for her imports by her exports and the interests on her capital invested abroad. It is now impossible to collect the greater part of this interest, especially on the large investments in London. We are importing raw material and food which in normal times are paid for in cash or short-time bills, while the greater part of the exports are manufactured goods sold on long-time book credit. The machine industry has huge sums owing it in Russia. Exports have, moreover, suffered more than imports, and the exports are concentrated in a few neutral countries. It would be easier if gold could be exported. But we are of the opinion that the keeping of a gold reserve is at present more important than the maintenance of the German mark abroad. . . . After the war, however, the best currency will be the currency of the victor.

<sup>1</sup> The Imperial Statistical Office (*Kaiserlich-statistisches Amt*) issues regularly an index number for Berlin based upon the retail prices of some 20 articles of food.

<sup>2</sup> Helfferich, speech in the Reichstag, March 10, 1915.

It will be noticed that no mention of the premium on gold is made nor is any explanation of the rise in prices offered. That under present conditions Germany is importing goods to an amount so in excess of her exports as to cause a depreciation of 33 per cent in the exchange at Amsterdam does not seem possible. Also Germany has been a borrowing rather than a lending country, and the "large investments in London," on which interest cannot be collected, are decidedly offset by English investments in Germany upon which, likewise, interest cannot be collected.

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